# Introduction

This is a step by step tutorial on how to display a map in Unity that was created in Tiled. We will go through the TMX(Tile Map XML) file format. I will show you how to use XML serialization to load in the TMX file format. We will then create an editor script to display the contents of the map in the inspector to include a preview of the map. We will then create an Editor script to import a new tmx file into your Unity project, this script will import the textures used for your map into your project in a folder that you choose. We will then create a script to display your Tiled Map in Unity itself and can be used in your Unity Game. Then we will convert our 2D map into a 3D map. Initially we will only work with displaying a map with the Orientation set too Orthogonal, the concepts for display a Hex, Isometric, and staggered will be the same I will leave this for you to figure out on your own.

Because we are using XML serialization there will be some features of Tiled that will not be able to include in this version.

* Tile Layer Format must be set to XML The following are not supported
  + CSV (Comma Separated Values)
  + Base64 (uncompressed)
  + and Base64 (zlib compressed)
* Having an external tile set (a Tile set with a source of tilesetName.tsx) is not supported

To support these features requires you to write your own xml parser. This may be something that I come back to at a later time.

The use of multiple tilesets is not tested nor is the use of multiple images in a tileset, in theory these elements should work.

The use of tilesets that have tile widths and heights greater than the width and height of a tile set by the map is also not tested but should work.

If you do not use the import tool to import your maps you will have to manually import your textures and the source strings will have to be manually changed.

If you are using Tiled version 0.17 or greater the string property will not load correctly using xml deserialization you will have to write your own xml parser.

Terrain types will not be supported; you can easily add this feature.

The only layer type that will be displayed in unity is the Tile Layer.

The code created in this project can be found on github <https://github.com/ktmarine1999/TileMapXML>

Tiled can be found at <https://thorbjorn.itch.io/tiled>. This is a very good map editing program, with its own file format called TMX(Tile Map XML). For more information on the tmx map format refer to <http://doc.mapeditor.org/reference/tmx-map-format>. There are many importers out there already both paid and free <http://doc.mapeditor.org/reference/support-for-tmx-maps>, scroll down the page until you come to the Unity 3D section. Tiled2Unity is a good free one, for more information see <http://www.seanba.com/introtiled2unity.html>.